

1836.024844

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

MICHAEL MEZEI and ADRIENN GESZTES

Serial No.: 236,724

Filed: August 26, 1988

For: LIPOSOMAL LOCAL ANESTHETIC AND ANALGESIC PRODUCTS

INFORMATION DISCLOSURE STATEMENT

Honorable Commissioner of Patents and Trademarks  
Washington, DC 20231

Sir:

In accordance with 37 C.F.R. §§1.56 and 1.97, applicants would like to bring the following information to the attention of the United States Patent and Trademark Office for consideration by the Examiner during prosecution of the subject application. The information is listed on Form PTO-1449, a copy of which is enclosed. Applicants do not admit that any of the information is prior art.

Okano et al. Yakugaku Zasshi Vol. 100 (11) pp. 1097-1105 (1980) describes the results of an investigation on the duration of anesthetic action of dibucaine in the presence of liposomes using intradermal wheal methods in guinea pigs. Two abstracts and a copy of the article are enclosed.

A. Gesztes and M. Mezei, Anesth Analg, Vol. 67:1079-1081 (1988) describes preparation of liposomes containing topical anesthetic agents and the investigation of their local anesthetic

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effect. The substance of this publication was previously disclosed by Gesztes and Mezei at the International Congress of Pharmaceutical Sciences F.I.P., Amsterdam, Netherlands, in September 1987. A copy of a preprint of this publication is enclosed. The F.I.P Abstract also is enclosed.

The following publications generally relate to investigations of the possible mechanism of action or effect of local anesthetics using the lipid bilayers of liposomes as a model membrane.

Bianconi et al., Biochemical and Biophysical Research Communications, Vol. 152(1):344-350 (1988)

Seelig et al., Biochimica et Biophysica Acta 939 (1988) 267-276

Kuroda and Fujiwara, Biochimica et Biophysica Acta 903 (1987) 395-410

"The Effect of Local Anaesthetics on the Osmotic Fragility of Liposomes", Biochemical Pharmacology, Vol. 31, No. 18, pp. 2999-3000 (1982)

Seelig, Biochimica et Biophysica Acta 899 (1987) 196-204

The first page of each of these articles is enclosed.

The following documents which are discussed on pages 1-8 of the subject application are enclosed for the Examiner's consideration:

U.S. Patent 4,016,100

U.S. Patent 4,089,801

U.S. Patent 4,235,871

U.S. Patent 4,485,054

Bangham et al., J. Mol. Biol. 13:238-252 (1965)

Batzri et al., Biochim. et Biophys. Acta, 298:1015-1019 (1973)

Papahadjopoulos et al., Biochim. et Biophys. Acta, 394:504-519 (1975)

M. Mezei, Liposomes as Drug Carriers, Edited by G. Gregoriadis, John Wiley & Sons Ltd., New York (1988), pp. 663-677

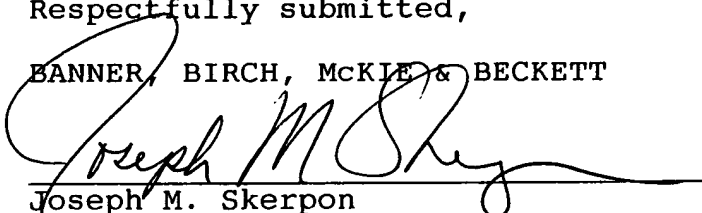
Applicant also would like to bring to the Examiner's attention his co-pending application Serial No. 212,012, filed on June 27, 1988, which is a divisional of Serial No. 774,266, now U.S. Patent No. 4,761,288. A copy of the Information Disclosure Statement submitted in connection with Serial No. 212,012, together with the cited references also is enclosed herein.

Finally, applicants are submitting a bibliography of papers authored or co-authored by M. Mezei, one of the inventors of the subject application.

Applicants respectfully request that the subject application be examined in light of the above information.

Respectfully submitted,

BANNER, BIRCH, MCKIE & BECKETT

  
Joseph M. Skerpon  
Registration No. 29,864

One Thomas Circle, N.W.  
Washington, DC 20005  
(202) 296-5500

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